Resilient Infrastructure & Security Checklist

Master Blueprint for Off-Grid Hardening, High-Performance Networking, and Secure Administration (Scalable Architecture)

When looking for the gold standard in professional networking installers who specialize in Ubiquiti (ui.com) products, the industry benchmark relies on specific credentials, structured deployment frameworks, and official ecosystem alignment [cite: 7].

The gold standard setup for professional UniFi installers encompasses the following core pillars, designed with a modular architecture that can be seamlessly scaled up across the project lifecycle:

1. Official Credentials & Vetting

- [ ] **Ubiquiti Certification Program:** The top tier of installers hold official certifications from Ubiquiti Academy, such as the UniFi Network Professional (UNP), UniFi Full Stack Professional (UFSP), or UniFi Wireless Admin (UWA) [cite: 7].
- [ ] **Official Directory Verification:** Elite integrators and managed service providers (MSPs) are officially listed on Ubiquiti's vetted directory (installers.ui.com), ensuring they have demonstrated verified expertise in deploying complex UniFi hardware architectures [cite: 7].
- [ ] **Low-Voltage & Industry Licenses:** Beyond manufacturer training, gold-standard commercial installers typically maintain low-voltage contracting licenses and industry credentials like BICSI certification to guarantee high-grade physical infrastructure work [cite: 7].

2. Infrastructure & Architectural Blueprint

- [ ] **The Unified Core:** Deployment of enterprise-grade UniFi Consoles (such as the UDM-Pro-Max) to act as the central routing, security, and deep-packet inspection brain without third-party inter-operation friction [cite: 7].
- [ ] **High-Density Wireless & PoE Switching:** Utilizing multi-gigabit hardware like U7 Pro access points and Pro Max PoE switches paired with structured, clean rack management, proper grounding, and battery/generator backup redundancies [cite: 7].
- [ ] **Comprehensive Site Surveys:** Performing professional RF (Radio Frequency) site assessments and floor-plan heatmapping prior to physical installation to eliminate dead zones and optimize device placement [cite: 7].

3. Security & Administrative Hardening

- [ ] **Zero-Trust & Segmentation:** Strict VLAN segmentation separating guest traffic, corporate data, IoT devices, and security cameras, enforced through tailored firewall rules and least-privilege access policies [cite: 7].
- [ ] **Credential & Access Management:** Mandatory multi-factor authentication (MFA) across all administrator touchpoints, coupled with secure offline recovery protocols (such as physical hardware security keys and securely stored master backups) [cite: 7].

4. Power & Hardened Protection (The Foundation)

- [ ] **Backup Generator:** Heavy-duty backup generator deployed for continuous power autonomy during grid outages [cite: 1, 7]. Trusted regional installers in Wisconsin (such as Mr. Holland's Home Services or Ideal Electric) provide full turnkey electrical integration engineered to scale up alongside expanded power loads.
- [ ] **EMP Protection:** Full-home electromagnetic pulse protection system installed (EMP Shield: empshield.com) [cite: 1, 7]. These licensed electrical partners can also professionally mount and tie in whole-home EMP protection devices directly to your electrical panels.

5. Networking & Hardware Architecture (Ubiquiti UniFi)

Central networking brain

- [ ] **Core Gateway:** UniFi Dream Machine Pro Max (UDM-Pro-Max) handling high-speed routing, deep packet inspection, and 10Gb speeds (store.ui.com) [cite: 1, 7].
- [ ] **Primary Internet:** High-speed Fiber Optic connection (gold standard) or traditional copper/cable if fiber is unavailable in the remote area [cite: 1, 7].
- [ ] **Failover Redundancy:** Automated multi-tier failover setup. Primary internet runs normally; upon failure, traffic automatically reroutes to Starlink or cellular LTE/5G [cite: 1, 7].
- [ ] **Starlink Setup Note:** Initial setup and testing utilize the bundled Starlink router, which is subsequently bypassed. Ethernet runs directly from the Starlink adapter into the Dream Machine WAN port [cite: 1, 7].
- [ ] **High-Performance Wi-Fi:** UniFi U7 Pro XGS (10Gb) access points powered via Power over Ethernet (PoE) [cite: 1, 7].

6. Physical Security & Access Control

- [ ] **Front Door Entry:** UVC-G6-Pro-Entry Ubiquiti G6 Pro Entry Smart Door Access System featuring a 12MP camera, 3-inch touch display, Face ID, NFC/key fob access, and two-way audio [cite: 1, 7].
- [ ] **Property Expansion:** Scalable integration architecture ready for extra security cameras around the perimeter, additional entry access points, and smart locks managed centrally via UniFi Protect [cite: 1, 7].

7. Utilities & Environmental Control

- [ ] **Water Filtration:** Whole-house reverse osmosis (RO) water filtration system for pristine water purification [cite: 1, 7]. Top-rated local water treatment experts in Wisconsin (such as Kinetico Water Systems or Water Doctors) specialize in engineering heavy-duty residential reverse osmosis and filtration setups with modular capacity for future expansion.

8. Account Security & Disaster Recovery

- [ ] **Administrator Hardening:** Homeowner admin accounts secured with mandatory, strict Two-Factor Authentication (2FA) [cite: 1, 7].
- [ ] **Credential Management:** Master passwords, device credentials, and recovery keys organized and secured using 1Password [cite: 1, 7].
- [ ] **Physical Emergency Kit:** 1Password emergency recovery kit printed out and permanently secured inside a heavy-duty Fort Knox safe bolted down in a hidden location inside the home [cite: 1, 7].

Confidential Master Deployment Checklist Built for Maximum Resilience, Security, and Autonomy (Scalable Architecture)